IN THE CLAIMS:

Cancel claims 19 and 26-53 without prejudice or admission, amend claims 20-23 and 25, and add new claims 54-76 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. - 19. (canceled).

20. (currently amended) A method of manufacturing a multi-tip probe according to claim 19; wherein the step of forming a plurality of electrodes comprises the steps of A method of manufacturing a multi-tip probe comprising the steps of:

forming a cantilever using photolithographic techniques;

forming a plurality of lead portions by lithography at a base portion of along the cantilever, forming and which terminate in a conductive shunt area at a distal end of the cantilever, cantilever; and

forming a plurality of electrodes at the <u>conductive</u> shunt area by sputtering or gas-assisted etching of the conductive <u>shunt area</u> distal end of the cantilever using a focused charged particle beam.

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21. (currently amended) A method of manufacturing a multi-tip probe according to claim 19; wherein the step of forming a plurality of electrodes comprises the steps of A method of manufacturing a multi-tip probe comprising the steps of:

forming a cantilever using photolithographic techniques;

forming a plurality of lead portions by lithography at a base portion of along the cantilever, cantilever; and

forming a plurality of electrodes at the distal end of the cantilever by irradiating the distal end of the cantilever with a focused charged particle beam while blowing a source gas toward the distal end.

- 22. (currently amended) A method of manufacturing a multi-tip probe according to claim 20 19; wherein the step of forming a plurality of electrodes comprises the steps of forming the respective electrodes are spaced apart from one another at a spacing of less than one micron from an adjacent electrode.
- 23. (currently amended) A method of manufacturing a multi-probe according to claim 19 20; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes by chemical vapor deposition using a focused ion beam device.

- 24. (previously presented) A method of manufacturing a multi-tip probe according to claim 23; wherein the step of forming a needle-shaped probe further comprises the step of forming the needle-shape probe with a curved structure so as to have resilience.
- 25. (currently amended) A method of manufacturing a multi-tip probe according to claim 19 20; wherein the step of forming the cantilever using photolithographic techniques includes the step of forming a convex portion at the distal end of the cantilever; and the step of forming a plurality of electrodes on the cantilever comprises forming the plurality of electrodes on the convex portion.
  - 26. 53. (canceled).
- 54. (new) A method of manufacturing a multi-tip probe comprising the steps of:

providing a cantilever having a distal end portion on which is formed a conductive film; and

dividing the conductive film into a plurality of electrodes by sputter etching or gas-assisted etching of the conductive film using a focused charged particle beam thereby forming a multi-tip probe.

55. (new) A method according to claim 54; wherein the plurality of electrodes have distal ends spaced apart less than one micron from one another.

- 56. (new) A method according to claim 55; wherein the providing step comprises providing a cantilever, and forming a plurality of conductive film lead portions extending lengthwise along the cantilever and terminating at a distal end portion thereof in a common conductive film.
- 57. (new) A method according to claim 56; wherein the conductive film lead portions and the common conductive film are formed by lithography.
- 58. (new) A method according to claim 56; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.
- 59. (new) A method according to claim 58; wherein each needle-shaped probe has a curved shape.
- 60. (new) A method according to claim 56; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam.

- 61. (new) A method according to claim 56; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam while directing an assist gas toward the distal end portion of the cantilever.
- 62. (new) A method according to claim 55; wherein the plurality of electrodes comprises four electrodes.
- 63. (new) A method according to claim 55; wherein the conductive film is formed of one of platinum, aluminum and tungsten.
- 64. (new) A method according to claim 54; wherein the providing step comprises providing a cantilever, and forming a plurality of conductive film lead portions extending lengthwise along the cantilever and terminating at a distal end portion thereof in a common conductive film.
- 65. (new) A method according to claim 64; wherein the conductive film lead portions and the common conductive film are formed by lithography.
- 66. (new) A method according to claim 54; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.

- 67. (new) A method according to claim 66; wherein each needle-shaped probe has a curved shape.
- 68. (new) A method according to claim 54; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam.
- 69. (new) A method according to claim 54; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam while directing an assist gas toward the distal end portion of the cantilever.
- 70. (new) A method according to claim 54; wherein the electrodes extend generally parallel to one another and are spaced apart from one another at a spacing less than one micron.
- 71. (new) A method of manufacturing a multi-tip probe comprising the steps of:

providing a cantilever having a distal end portion;

forming a plurality of conductive lead portions

extending lengthwise along the cantilever; and

of the cantilever and in contact with respective ones of the conductive lead portions by irradiating the distal end portion of the cantilever with a focused charged particle beam while directing a source gas toward the distal end portion thereby forming a multi-tip probe.

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- 72. (new) A method according to claim 71; wherein the plurality of electrodes have distal ends spaced apart less than one micron from one another.
- 73. (new) A method according to claim 72; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.
- 74. (new) A method according to claim 73; wherein each needle-shaped probe has a curved shape.
- 75. (new) A method according to claim 71; wherein the plurality of electrodes comprises four electrodes.
- 76. (new) A method according to claim 71; wherein the electrodes extend generally parallel to one another and are spaced apart from one another at a spacing less than one micron.